

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-026288**Date Inspected:** 13-Sep-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Tony Sherwood**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Sections**Summary of Items Observed:**

This Quality Assurance (QA) Inspector, Craig Hager was on site at the job site between the times noted above.

This QA Inspector was on site to randomly observe Quality Control (QC) personnel perform Non-Destructive Testing (NDT) and monitor American Bridge/Fluor (ABF) welding operations. This Quality Assurance (QA) Inspector, Craig Hager observed the following.

Self Anchored Suspension (SAS) Tower, Electro Slag Welding (ESW):

ESW weld location N-face B: This QA Inspector observed ABF welding personnel Jeremy Dolman (# 5042) using a grinder to contour the weld at areas marked by various QC personnel after a visual inspection. The grinding also consisted of shallow excavations (less than 10 mm deep) to remove Magnetic Particle Testing (MT) indications. This QA Inspector observed the work was being performed between the 3-meter and 9-meter elevations. This QA Inspector randomly observed as QC Inspectors Jesus Cayabyab and/or Tony Sherwood performed MT to verify the removal of the various indications. QC Inspector Jesus Cayabyab was present from approximately 0730 hours until 0930 hours and replaced by QC Inspector Tony Sherwood. This QA Inspector observed that after the indications had been removed by grinding and verified with visual and MT by QC personnel ABF welding personnel Jeremy Dolman (# 5042) would use a gas torch to preheat prior to welding, see photo below. This QA Inspector observed ABF welding personnel Jeremy Dolman (# 5042) use a temperature indicating marker to verify the preheat temperature was greater than 300°F. This QA Inspector observed QC Inspector Tony Sherwood verify the following welding parameters; 117 amperes. This QA observed a 3.2 mm diameter E7018H4R electrode was being used. The welding observed this date appeared to comply with Welding Procedure Specification (WPS) ABF-WPS-D15-1002 Repair.

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## WELDING INSPECTION REPORT

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ESW weld location L -face A: This QA Inspector randomly observed ABF personnel Jeff Stone using a grinder to contour the weld between the 3-meter and 9-meter elevation at areas previously marked by various QC personnel.

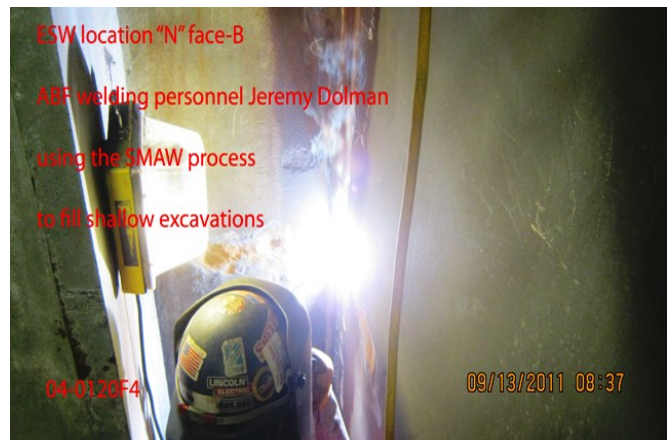
ESW weld location M -face A: This QA Inspector randomly observed ABF personnel Alex Blanco using a grinder to contour the weld between the 3-meter and 9-meter elevation at areas previously marked by various QC personnel.

ESW weld location G -face B: This QA Inspector randomly observed ABF personnel Alex Blanco later this date using the carbon arc process to remove the temporary welds which held the strong backs for the ESW process.

ESW weld location R- face B: This QA Inspector randomly observed QC Inspector John Pagliero using the Ultrasonic Testing (UT) method from approximately Y-150 to Y-1000. QC Inspector John Pagliero informed this QA Inspector he had instructed by ABF QC Manager Jim Bowers to perform UT approximately 300 mm above and below the area where ESW had been restarted during the welding process.

### Summary of Conversations:

This QA Inspector had general conversations with American Bridge/Fluor (ABF) and Caltrans personnel during this shift. Except as described above and noted above there were no notable conversations.



### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Hager,Craig	Quality Assurance Inspector
<b>Reviewed By:</b>	Levell,Bill	QA Reviewer

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